AMENDMENTS TO THE SPECIFICATION

Please amend the Specification by substituting pages 15-19 of the Specification below as amended:

Next, processing relating to the characteristic of the embodiment in such a digital mixer will be described in more detail. This processing includes processing corresponding to several events so that when detecting a predetermined event, the CPU 115 executes processing corresponding thereto.

First, the processing shown in FIG. 7 is processing corresponding to an ON event of the selection switch 7ic of the channel strip corresponding to an i-th input channel.

In this processing, the value of a variable is set in Step S1. SON is a flag that is set to "1 (one)" when any of the selection switches 70c is ON, and SC is a variable showing the number of the input channel in selection by the selection switch 70c.

Next, a light emitter of the selection switch 7ic pressed is turned on in Step S2. Each of the selection switches 70c includes a light emitter implemented by a light emitting diode (LED) or the like and is configured to be able to show the user the ON/OFF state of the switch by the light emitter. As shown by heart marks in FIG. 4, paring two input channels is also performed, but only one of input channels can be selected at the same time also in this case. However, when one of the pair is selected, it is preferable that the light emitter of the other is made to blink to show the selection.

Next, the kind of the view displayed on the display 10 is checked in Step S3, and when it is the ~~input channel~~parameter setting view, the cursor 41 is moved to the parameter of the i-channel corresponding to the turned on selection switch 7ic in Step S4. If there is a need to change between the tabs 31, the change is also performed. In the case of the ~~parameter~~ input channel setting view in Step S3, the view is changed to a view for editing the parameters of the i-channel in Step S5, and

display contents are also changed to the parameters of the i-channel. In the case of other views, for example, a setting view for MIDI, time code, or the like, the processing is ended without changing the display.

The processing shown in FIG. 8 is processing corresponding to an OFF event of the selection switch 7ic of the channel strip corresponding to the i-th input channel.

In this processing, in Step S11, it is judged whether or not "i" is equal to the variable SC that has been set in Step S1 in FIG. 7, and when they are equal, SON is set to "0 (zero)" in Step S12, and when they are not equal, the processing is ended without further steps.

Since the number of the channel corresponding to the finally turned on selection switch 70c is set in SC at that point of time, this processing brings SON to "0" only when the finally pressed selection switch 70c is released.

The processing shown in FIG. 9 is processing corresponding to an operation event of a j-th rotary encoder of the selected channel control switch group 80.

In this processing, the manipulation degree of a control is set first to a variable Δx in Step S21. Then, for the channel designated by the variable SC, that is, the channel corresponding to the finally turned-on selection switch 7ic, the parameter corresponding to the operated rotary encoder is changed in accordance with Δx in Step S22. Then, when the parameter is in display in Step S23, the display is updated in accordance with the change in Step S24, and when not in display, the processing is ended without further steps.

In short, this processing is processing relating to the function of the conventional selected channel control switch group 80.

The processing shown in FIG. 10 is processing corresponding to an operation event of the increase/decrease controls 50. In this case, both the case when a rotary encoder 51 is operated and the case when an increase switch 52 or a decrease switch 53 is operated are recognized as the same operation event. However, when the rotary encoder 51 is operated, the manipulation degree becomes positive or negative value according to the operation direction and has a magnitude according to the operation speed, when the increase switch 52 is operated, the manipulation degree becomes a predetermined positive value, and when the decrease switch 53 is operated, a predetermined negative value. It should be noted that the increase switch 52 and the decrease switch 53 have repeat functions of automatically repeating increase and decrease by being kept pressed, respectively.

In this processing, the manipulation degree of the increase/decrease controls 50 is first set to a variable Δy in Step S31. Then, when the assignment switch 90 is operated (when it is in an ON state) in Step S32, assignment processing of a parameter to the increase/decrease controls 50 is performed in Steps S33 to S35.

Specifically, a variable EAP representing the parameter to be assigned to the increase/decrease controls 50 is changed in accordance with the value of Δy, the parameter assignment view as shown in FIG. 6C is displayed in an overlapping manner, a predetermined waiting period is set to a variable CNT and a timer is activated, and then the processing is ended. In this processing, especially in Step S33, the CPU 115 functions as an assignor.

By this processing, the user can move the cursor on the parameter assignment view so as to select the parameter to be assigned to the increase/decrease controls 50 by operating the increase/decrease controls 50 while pressing the assignment switch 90. The alternatives of the

parameter are not limited to those shown, and when the cursor reaches the end, the view is scrolled. Further, when the overlap display has been already performed in Step S34, it is only required to rewrite the overlap view. Further it is also adoptable not to perform the processing in Step S35 but to erase the parameter assignment view at the time of the assignment switch 90 being tuned off. Further, it is also adoptable to prepare the parameter assignment view as an independent view that is not an overlap view.

Alternatively, when the assignment switch 90 is not ON in Step S32, the flow proceeds to Step S36. Then, when the variable SON is "1" here, the parameter corresponding to the variable EAP for the channel that is designated by the variable SC is changed in accordance with Δy in Step S37.

Then, when the parameter is in display, the flow proceeds from Step S38 to Step S42 in which the display is updated in accordance with the change, and when it is not in display, the flow proceeds to Step S39 and thereafter in which a setting view for the changed parameter is overlap-displayed, a predetermined waiting period is set to the variable CNT and the timer is activated in Step S40, and the processing is ended. This view is, for example, one that is shown in FIG. 6A or FIG. 6B and displays the channel number, the kind of the parameter, and the setting contents. FIG. 6A shows three ON/OFF parameters, but only one of them can be assigned to the increase/decrease controls 50 at a time.

Alternatively, when SON is not "1" in Step S36, the flow proceeds to Step S41 and thereafter in which the parameter corresponding to the cursor position is changed in accordance with Δy, in accordance with which the display is updated.

The above-described processing is the most characteristic processing in the embodiment, and the CPU 115 functions as a parameter controller in Steps S36, S37, and S41. Further, the CPU 115 functions as a display controller in Steps S34 and S39.

The processing shown in FIG. 11 is interrupt processing relating to the timer, and processing performed at regular time intervals when the timer is activated.

In this processing, the variable CNT is decremented by 1 in Step S51, and when the CNT is 0 in Step S52, the overlap view displayed on the display portion of the display 10 is erased in Step S53 and the timer is stopped in Step S54. When it is not 0, the processing is ended without further steps.

By the above processing, the overlap view displayed in the processing shown in FIG. 10 can be erased after a lapse of the predetermined waiting period.

By performing the processing shown in the flowcharts in FIG. 7 to FIG. 11 in accordance with each event, a particular parameter can be assigned to the increase/decrease controls 50 that have been conventionally provided as controls for increasing/decreasing the parameter corresponding to the cursor position, so that only when the increase/decrease controls 50 are operated concurrently with the selection switch 7ic, the increase/decrease controls 50 can be used as controls for editing an assigned parameter of a channel corresponding to the operated selection switch 7ic. Further, this assignment can also be performed by concurrently operating both the assignment switch 90 and the increase/decrease controls 50. Accordingly, only one assignment switch 90 is newly provided, whereby an arbitrary parameter can be edited by increase/decrease controls 50 without selection by the cursor every time, so that the operability of the digital mixer can be greatly improved with little or no increase in cost.

As has been described, according to the digital mixer of the invention, the operability of the digital mixer can be greatly improved with little or no increase in cost.